G SLIP

FROM: ADDI

DATE: 22 June

	TO	INITIALS	DATE	REMARKS
DIR	1		6/22	STAT
DEP/DIR	2		6.22	
EXEC/DIR	3			
ASST FOR ADMIN				
ASST FOR OPS	4		23 June	
O/D75			(1)	
ASST FOR PA				
ASST FOR P&D				
CH/CSD				
CH/PD				
CH/PSD				
CH/TID	6		30 June 64	
CH/CIA/PID	5		25 June	
CH/DIA/NPIC				
CH/SPAD				
LO/NSA				

ADDI FILES

TRANSMITTAL SLIP

DATE: 16 June 64

TO: NPIC/Dir

ROOM NO. 6N212

BUILDING 213

REMARKS:

50X1

FROM:

DDI/CGS

ROOM NO. 7-F-33

BUILDING HQ

EXTENSION

FORM NO. 241 REPLACES FORM 36-8 ☆ GPO : 1957 (47)

COPY

SECRET

16 JUN 1964

MEMORANDUM FOR THE DIRECTOR OF CENTRAL INTELLIGENCE

SUBJECT: Capabilities of Peripheral Photography of Cuba

1. Previous COMOR examination of this subject (USIB-D-41.14/137, COMOR-D-24/137, 1 May 1964) has resulted in the conclusion that peripheral reconnaissance could satisfy present requirements for coverage of coastal areas of Cuba, but limitations of range and resolution would prevent satisfactory coverage of inland activities.

2. These conclusions were based on the capabilities of the 100" camera, which is regarded as the best currently available for the purpose. This camera under optimum conditions can provide useable photography to a distance of 20 miles from the aircraft. The interpretability of the photography at the longer ranges, however, is minimal. Resolutions under the best operating conditions are 3 to 5 feet at 3 miles, 5 feet at 3 to 6 miles, and about 10 feet at greater distances. Assuming that the aircraft is flying 5 miles from the coast, maximum penetration would be only 15 miles inland.

3. Additional degrading features must also be considered. Obliquity itself has a degrading effect on scale and readability. At the greater distances from the camera, mere identification of the target itself is difficult, and meaningful interpretation is nearly impossible. Of equal importance is defilade, or terrain obstructions. As will be recalled, the MRBM installations in Cuba were generally emplaced in a defile and were visible only from overhead. Trees and vegetation add to this problem. Finally there is the factor of atmospheric conditions. Clouds and haze have a much greater effect on slant range photography than on vertical.

SECRET

4. The attached map is designed to illustrate the maximum scope of peripheral photography, assuming optimum conditions as follows:

a. The flight track will maintain an offshore distance no greater than 5 miles.

b. The 100 inch camera will be used.

c. The maximum effective camera range is taken to be 20 miles. (The actual effective range, considering atmospheric effects and deterioration of resolution, probably will be less than half of this distance.)

d. Terrain obstacles, which also would reduce coverage, have not been taken into account.

5. The map indicates that coverage would be inadequate for present intelligence needs, because:

a. Only about half of the current COMOR targets could be covered.

b. Only 15 of the 27 Highest Priority targets could be covered.

c. Area coverage probably would not amount to more than 20 percent, which is unacceptable for search or surveillance purposes.

d. Coverage of targets of military interest in the Havana area would be fair to good, but coverage of central Cuban targets would be negligible.

6. Conclusion: Peripheral photography would be inadequate in both scope and quality to provide an acceptable alternative to U-2 reconnaissance in Cuba.

/S/

R. JACK SMITH
Acting Deputy Director (Intelligence)

Attachment: Map of Cuba

DDI/CGS/RECCE, [redacted] 15 June 1964) 50X1

Dist: Orig & 1 - Addressee
2 - O/DD/I
1 - CGS Chrono
1 - DD/S&T
1 - NPIC (Mr. Lundahl)